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AUTHOR Johnstone, D. Bruce
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ABSTRACT

The paper uses data from the United States and several other industrialized nations to evaluate the costs of post-secondary education. Discussed are: variations on the concept of higher educational costs; three cost issues (how much higher education, the unit costs of higher education, and sharing the costs); higher education costs and social goals--equality of opportunity, efficiency, and equity; the costs of higher education in five nations (United States, United Kingdom, Japan, Australia, Sweden). Among the international trends identified are the following: (1) aggregate expenditures will increase in real terms; (2) the underrepresentation of children from less privileged socioeconomic classes will remain a great problem in all nations; (3) pressures to spend more on aggregate higher educational capacity and on a per-unit basis will be resisted by increasing pressures from governments (taxpayers) to lower unit costs and become more productive; (4) technology (though unsuccessful in altering unit costs in Europe and North America) may play a role in the cost-effective expansion of higher education in Asia and sparsely populated regions; (5) higher education will become increasingly differentiated; (6) higher education will continue to broaden its revenue base away from overwhelming reliance on the taxpayer. Forty-four endnotes are attached. (DB)

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# The Costs of Higher Education: An Essay on the Comparative Financing of Universities

D. Bruce Johnstone

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**Special Studies in Comparative Education**

Number Twenty-Three

**COMPARATIVE EDUCATION CENTER**

GRADUATE SCHOOL OF EDUCATION
STATE UNIVERSITY OF NEW YORK AT BUFFALO

HE 023 181

# THE COSTS OF HIGHER EDUCATION:
# An Essay on the Comparative Financing of Universities

D. Bruce Johnstone

Special Studies in Comparative Education
Number Twenty-Three

Comparative Education Center
Graduate School of Education
State University of New York at Buffalo

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# INTRODUCTION

This publication, the twenty-third in the Special Studies series of the Comparative Education Center, deals with a topic of both practical and theoretical importance to contemporary higher education -- measuring, assessing and evaluating the costs of post-secondary education. This topic is approached comparatively, bringing insights and data from the United States and several other industrialized nations. This comparative approach permits the reader to understand some of the broader underlying issues as well as the specific realities of a single country. While the experience of Australia or Britain is not directly applicable to the United States, a comparative perspective may yield insights concerning solutions to problems tried in other countries that be at least partly useful in others. Without question, there are many common elements in the educational equation worldwide.

This is a particularly opportune time to examine the issue of the financing of higher education. The issue is being hotly debated in many countries. The basic structure of financing is now in the process of significant change in Britain, and many countries are debating the relevance of loans to students to replace the traditional grant system.

There is no one more qualified to provide an international perspective on the financing of higher education than D. Bruce Johnstone. He is currently Chancellor of the State University of

New York, the largest university system in the United States. He served earlier as President of the State University College at Buffalo and has been an adjunct professor of higher education at the State University of New York at Buffalo. Dr. Johnstone is author of Sharing the Costs of Higher Education: Student Financial Assistance in the United Kingdom, the Federal Republic of Germany, France, Sweden and the United States (New York: The College Board 1986).

This essay will also appear in the International Encyclopedia of Comparative Higher Education, to be published by Garland Publishing, Inc., in 1990.

Philip G. Altbach, Director
Comparative Education Center

# THE COSTS OF HIGHER EDUCATION

D. Bruce Johnstone

Higher education in any society is a costly enterprise. It is labor intensive, and the labor, especially the highly-skilled professoriate, is expensive relative to the work force generally. Higher education also requires large numbers of professional, semi-skilled, and unskilled workers -- not to mention books and periodicals, many square feet of classroom and office space, expensive machines, and living facilities for students.

These costs are obviously important. They limit the ability of the institution to pursue certain programs or to appoint certain faculty for which it does not yet have resources. These costs may also limit the ability of the students to pay whatever is required to maintain their student status. Costs limit the capacity of the government to expand access or to affect the kind or quality of education offered. In some way, the costs of higher education are thought to be a key ingredient in issues relating to quality, accessibility, equity, managerial efficiency, and national affordability.

Yet the very term "cost," can be used in many quite different ways, with different values and different meanings as in the preceding paragraph. The aim of this chapter is to clarify some critical dimensions of "cost" and to use these to explore comparatively some issues that are common to higher education in all countries.

## VARIATIONS ON CONCEPT OF HIGHER EDUCATIONAL COSTS

There are three broad categories of higher educational costs.[1] First are the costs of instruction, represented by those resources supplied by the institution, as in faculty, equipment, books, buildings, heat and light, support staff, and the like. These are the costs that would appear in an institution's

operating budget, measured over time by the sum of wages and salaries paid, equipment and supplies purchased, and physical plant amortized or depreciated. These costs may be faced by students and families depending on the degree to which they are passed on in the form of tuition, as opposed to covered from some other source such as taxpayer or philanthropic subsidies.

Second are the costs of student living, represented by the student's or family's expenditures for room, board, and other normal living costs, plus those expenditures that are occasioned by the demands of study, as in books, laboratory equipment, and transportation between home and university. These costs vary according to whether the student lives at home and commutes or requires residence at or near the campus, as well as the prevailing living standards for students, especially in comparison with the prevailing living standards for non-student age peers. These costs are generally faced by the student, or by the student and family, although they might, as in France and Germany and all of the socialist countries, be artificially low because of government (taxpayer) subsidies of student meals, dormitories, and other expenses.

Third are student foregone earnings. Since "cost" is a measure of alternatives foregone, it is at least theoretically appropriate to count as a cost of higher education the foregone earnings (actually, the foregone real production presumably measured by those potential earnings) of the students. Clearly, this construct is most real and useful in a society where there is abundant productive work for 18-24 year old youth and where their withdrawal from that work force for the purpose of university study is a real productive loss to the economy. This is more likely to be the situation in an industrialized nation with a strong demand for relatively unskilled labor and a low rate of unemployment -- for example, post-war West Germany, Scandinavia, Japan, United States, and a few other Pacific rim nations, but probably not most of Africa, Latin-America, or Asia,

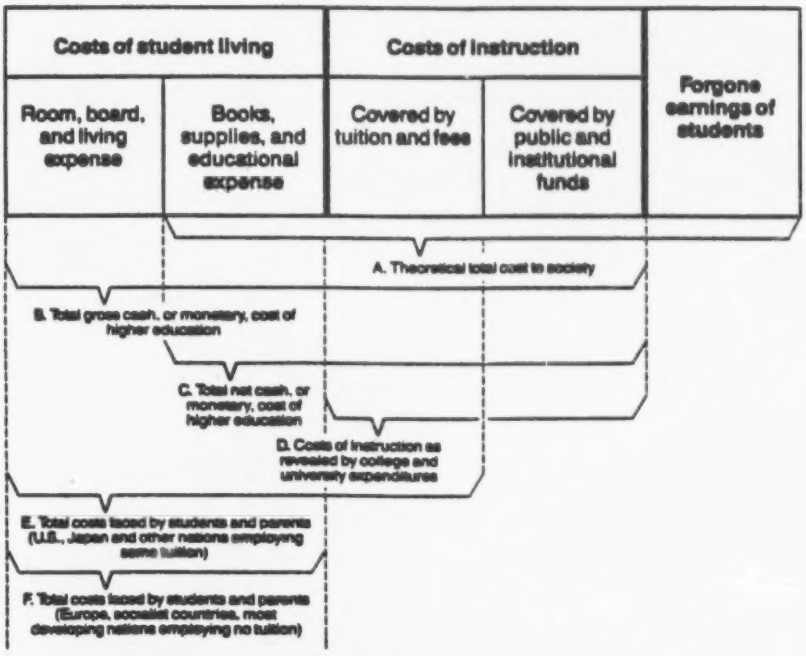
where high unemployment and underemployment mean that young adults actually forego little in terms of jobs and earnings by attending college instead of working.[2]

Figure 1 illustrates these components of "cost" as well as a number of different definitions, or meanings, of cost, depending on the components included:

A. Theoretical total cost to society: includes foregone earnings, which arise because of the enterprise of higher education, but excludes the basic costs of room and board, which would presumably be incurred with or without higher education.

**FIGURE 1**

**The Costs of Higher Education:**
**The Range of Concepts**


Costs of student living
Costs of instruction
Room, board, and living expense
Books, supplies, and educational expense
Covered by tuition and fees
Covered by public and institutional funds
Forgone earnings of students
A. Theoretical total cost to society
B. Total gross cash, or monetary, cost of higher education
C. Total net cash, or monetary, cost of higher education
D. Costs of instruction as revealed by college and university expenditures
E. Total costs faced by students and parents (U.S., Japan and other nations employing some tuition)
F. Total costs faced by students and parents (Europe, socialist countries, most developing nations employing no tuition)

*Source:* D. Bruce Johnstone, Sharing the Cost of Higher Education (New York: The College Board, 1986), p.3.

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B. Total gross cash, or monetary, cost of higher education: includes all costs for which payments must be made by somebody (students, parents, taxpayers, philanthropists) to someone or something, excluding only the cost of foregone earnings, for which no exchange would be made.

C. Total net cash, or monetary cost of higher education: excludes the costs of room, board, and other basic living expenses that would be incurred in any event and that are not truly a function of university study.

D. Cost of instruction, as revealed by college and university expenditures.

E. Total costs faced by students and parents where tuition payments cover a portion of instructional costs: includes all costs of student living plus whatever portion of instructional costs are borne by students and parents in the form of tuition -- as in the United States, Japan, Brazil, India, and the Philippines.

F. Total costs faced by students and parents where higher education is "free" -- that is, without tuition: excludes all costs of instruction, which are presumably picked up by some combination of taxpayers, philanthropists, and businesses or their consumers -- as in most of Eastern and Western Europe and most of the World's developing nations.

## THE COSTS OF HIGHER EDUCATION: THREE ISSUES

Regardless of definition, all nations are confronted by, and must resolve, three issues, or questions, regarding the cost of higher education. First, how much should there be? That is, what should a nation devote of its resources to higher education? Second, what should be the unit cost, or relative leanness or richness, of higher education? Third, how should these costs,

whether "total" or "unit," be borne by, or apportioned among, those who must pay them?

How much higher education: "How much?" can be addressed in monetary units, as in definition "C" of the preceding section. Or, the total resources devoted to higher education can be measured by the percentage of the nation's GNP to be devoted to higher education, or the percentage of the government budget, or the total of all public expenditures devoted to higher education, or by any of several "cohort attainment" measures: e.g., the percentage of 19-21 year olds enrolled in higher education at a given moment, or the percentage of 25-35 year olds who hold at least a first degree, or the percentage of a single age cohort who will enter (or will graduate from) a higher educational institution.

The appropriate total cost -- i.e., "how much higher education?" -- is an issue particularly to the degree that these costs are borne by the general taxpayer, and then for the same reason that any public expenditure is an issue: Does a public expenditure of this magnitude bring a return to society that is greater, or more beneficial, than whatever alternative public expenditure (e.g., more or better primary education or a cleaner environment or more public health or more and better roads and bridges) could have been obtained from these same public resources?

To counter a challenge to the costs of higher education with propositions such as "higher education is an investment," or "its worth cannot be measured," begs the question. Of course it is possible for a particular level of higher educational expenditure to be "too costly" for the resources available to a particular society and, thus, for that society to be overinvesting in higher education -- just as it is possible for a society to underinvest and for its higher educational enterprise to cost too little. Economists look to the "marginal," or the last increment of, expense and to its associated benefits in order to judge the

appropriateness of a particular level of public expenditure. (Actually, so do non-economists, although they may employ different terms or constructs!) Have the last public dollars, for example, been devoted to an expansion in sheer capacity and thus to an increase in the number of students being educated at the tertiary level? Has the expansion been, or should it be, in a particular sector of the tertiary level: say, engineering or technical education? Has the last unit of expenditure been devoted, rather, to an increase in the number or supposed quality of the faculty or to the availability of technical equipment and facilities and other support expenditures and thus, presumably, to an increase in the quality of higher education received by a constant number of students? Or, has the most recent increment of public expenditure gone -- or should the next increment of public expenditure go -- to the furtherance of what are essentially social goals, such as expanding the number of hitherto underserved students, who may be women, children of working or peasant families, ethnic minorities, etc.?

In any event, the appropriate total cost of higher education, and more particularly the appropriate total taxpayer-borne expenditure on higher education, depends on the public good created <u>at the margin</u> of public higher educational expenditures. The measure of the public good, or social benefit, may be political, or at least judgmental, and is clearly in the province of government rather than economics. But rational public policy will continue devoting public expenditure to higher education as long as the incremental benefit from that marginal expenditure is clearly greater than the benefits of alternative public expenditures or the benefit of returning the claims on resources to the taxpayers from whence they came.

<u>The unit costs of higher education</u>: The second macro-issue is the appropriate unit cost of higher education. The question deals not with the total amount of resources, but with their efficient use. What ought to be the costs per student, or per

full-time equivalent student, or per graduate, or per engineer and physician produced, or per whatever-other-valid-output-measure-is-available?

Such cost measures are enormously difficult to obtain with validity even in the U.S., in part because of the incompleteness of so much reported data (e.g., the failure, frequently, to include the indirect costs of health insurance and pension contributions), and difficulty in attributing research and service costs to student instruction. The classic work on American higher education costs, by Howard Bowen in 1980, established a very great range of unit costs among United States institutions, with the principal explanatory variable being not the size of the campus, nor the type of curriculum, nor the extra resources that might be assumed to be necessary to educate one or another kind of student, but merely the revenue available -- principally from endowments and tuitions. In other words, colleges and universities that were well endowed to begin with and that could command high tuitions maximized their revenues and found seemingly worthwhile things to do with all of the income, while poorer and less competitive colleges also found ways to produce a respectable kind of education for whatever resources were available to them.[3]

Countries with national systems can be expected to exhibit much less variation in unit costs, with the principal determinants of per-student instructional costs being:

- Average faculty salaries (itself often a function of average age of faculty rather than average starting or ending salaries);
- Faculty-student ratios (in turn a function of prevailing instructional modes, of class or lecture sizes, and of teaching loads);
- The plenitude or scarcity of support-staff (professional, administrative, clerical, and maintenance);

- The extent and quality of facilities and equipment; and
- The proportion of costs appropriately charged to teaching and to other aspects of student life as opposed to basic and applied research.

Reliable, comparative higher education cost data is virtually non-existent. The principal sources of published works are UNESCO and the World Bank. However, most of their data is as reported by the various education and information ministries, and suffers from unclear and often changing definitions -- e.g., as between actual expenditures and initial budget authorizations, or sometimes counting pension and health benefits and sometimes not, or variously including or excluding auxiliary enterprise or debt service costs.[4] Much of what can be said of comparative higher educational costs, then, needs to be plausibly intuitive and desirably to be not inconsistent with the limited available data, but needs not be necessarily drawn from, or even always be verifiable from, such data.

Most U.S. institutions of higher education, for example, are comparatively "rich" in support staff and facilities. However, faculty salaries are not all that high relative to wages and salaries generally, at least not in comparison with West Europe and most of the developing world, although the highest paid salaries in the United States universities will be quite high comparatively. Student-faculty ratios vary from the "rich and low," in well-endowed, high-tuition private institution, to the "poor and high" in many public community colleges and nonselective, poorly-endowed private institutions. Universities in the United Kingdom, on the other hand, tend to have low -- and therefore costly -- student faculty ratios, but the 1980s brought financial strains that have led to an deterioration of facilities, equipment, and support staff.[5] French and Mediterranean universities tend to exhibit higher student-faculty ratios, lower faculty-support staff ratios, and generally less adequate facilities and equipment, yielding generally lower unit

costs than British, Northern European, or North American universities.

It is in unit costs relative to per-capita income, or relative to per-capita tax revenues, or relative to unit costs of, say, primary education, that higher education becomes so terribly costly throughout much of the developing world. Psacharopoulos and Woodhall, summarizing research of interest to the World Bank in 1985, cited higher education unit costs in developing nations that were 500 percent of the per capita GNP, with 1000 percent not uncommon in Africa -- compared to 55 percent in developed countries. Similarly, they cited prevailing university per-student costs in the developed world in the range of three to five times the per-student costs at the primary level, while the ratios of university to primary school unit costs in poor countries were 40:1, 80:1, or even as high as 100:1.[6]

The explanation for these enormously high unit costs in the universities of much of the developing world -- relative to the wealth of the nations or to unit costs in other parts of their public sectors -- lies in such factors as high salaries, low enrollments (and consequent inability to reap any significant economies of scale), and entrenched elitist positions of many third world universities. But it is significant that it is the unit costs, not so much the total expenditures, that are so outrageously high. These unit costs are highly sensitive to enrollment and general productivity increases, giving rise to the potential for expanded enrollments, increased efficiencies, and lower unit costs for little or no increased taxpayer-borne expenditures.

Sharing the costs: A third macro-issue is how the costs of higher education should be apportioned among the four parties -- taxpayers, parents, students, and philanthropists -- who must, between them, meet all of the costs of higher education in any society. Johnstone's 1986 study of cost-sharing in the United

States, the United Kingdom, France, Germany, and Sweden elaborated on these sources:[7]

- The taxpayer, through taxes on income, consumption, assets, sales or manufacturing, and including any indirect "tax" of inflation brought on by public deficit financing;
- The parents, through direct contributions, either to the institution (i.e., tuition) or to the student, or through indirect or in-kind contributions of room, board, laundry, and the like to cover the costs of student living;
- The student, through depletion of savings, through term-time or holiday work, or through loans; or
- The philanthropist, whether individual, corporate, or institutional, through voluntary donations that reduce the expenses that might otherwise have to be borne by one or more of the aforementioned parties. (Some would have business a fifth and distinct partner. The perspective of Johnstone's study, however, is that business's share, if there be one, is more appropriately viewed either as voluntary and borne by the owners, in which case it can be included within the category "philanthropist," or as involuntary and borne by the general consumer, in which case its incidence is more like that of a sales or consumption tax and can be viewed at least conceptually as quite indistinguishable from a burden borne by the general taxpayer.)

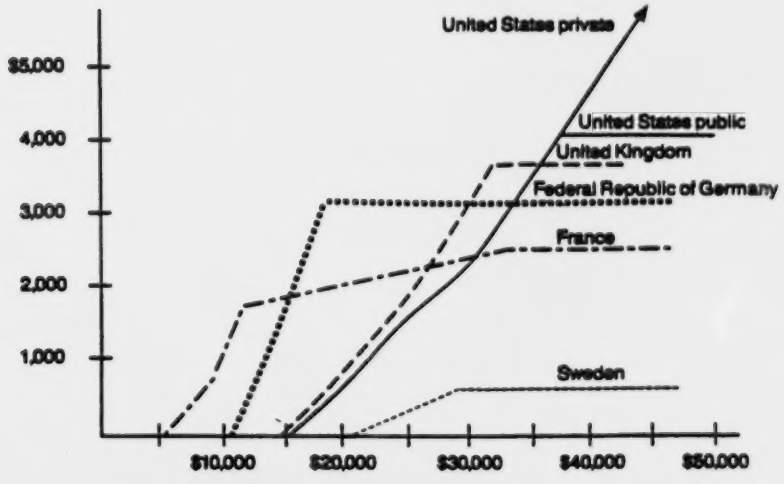
From this paradigm flow many questions and issues on which nations have taken very different stands. For example, is the parent expected to contribute to the higher educational costs of the child? If so, at what (low) parental income does this expectation begin to be lessened, and at what rate are expected contributions lowered as incomes fall? Or, to view the very same policy -- "means testing" -- from the perspective of increasing

incomes, at what level of parental income (and possibly assets) is the parent believed to be able to contribute to higher educational costs, and how does this expected contribution increase as parental income increases?

Figure 2 compares expected parental contributions toward their children's higher educational expenses in 1985-86 for the United States, the United Kingdom, France, Germany, and Sweden. Sweden, at the extreme, expects no parental contribution regardless of income or assets. Taxpayers pay for all institutional costs, and the costs of student living are divided between the student, through loans, and the taxpayer, through grants (substantially increased beginning in 1989) and through the implicit grant of the taxpayer-borne loan subsidies.

**FIGURE 2**

**Higher education expenses borne by parents as a function of family income, United Kingdom, Federal Republic of Germany, France, Sweden, and the United States, 1985-86**




*Source:* D. Bruce Johnstone, Sharing the Cost of Higher Education (New York: The College Board, 1986), p. 147.

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Parents in the United States face potentially extremely high costs, including tuitions ranging as high as $12,000 for those who elect to send their sons or daughters to expensive private colleges, in addition to costs of student living and transportation, which can add another $5-7,000. However, most United States students are in the public sector, with total expenses more like $6-8,000, or even substantially lower for students living at home. Furthermore, the means testing, or need analysis, shields most needy students and families from costs beyond their capacity to pay, whether in the public or the private sector. The expected parental contribution only begins at incomes in excess of about $15,000. As incomes rise above this level, parents are expected to pay a greater and greater share, although an American family with two children both in private colleges could still pay less than the full combined charge -- that is, could conceivably still receive some assistance -- at an annual income as high as $150,000. The much celebrated and notorious college prices (tuition, room, board, and all expenses) of $18,000 and above are only in fact paid in full by a very small number of families, with very high incomes, who freely choose such private sector institutions over the public sector alternatives.

British parents face much the same schedule of expected contributions as a function of income. The total cost faced by families in the United Kingdom is still, however, only the cost of student living, as tuition is paid by the government for eligible Mandatory Grant holders. Thus, low and low-middle income British and American parents face just about the same burdens. American parents who pay more are those who have children in high tuition institutions and whose incomes are high enough to generate expected contributions large enough to cover costs of student living plus at least some of the tuition costs.

German parents face costs of student living similar to those faced by parents of American students in public colleges and

universities, but their expected contributions begin at a much lower threshold and are greater at every comparable income earned. French parents face a lower schedule of student living costs, largely because of the prevalence of indirect taxpayer subsidization of such expenses as food, shelter and transportation, but the expected parental contribution begins, and need-based aid phases out, at even lower incomes. Thus, German families at a lower-middle income level and below typically pay more than their American counterparts, and low and lower-middle income French families pay still more.

Student contributions, among the five nations in Johnstone's 1986 study, are highest overall in Sweden, although the highest individual contributions would be found in the United States among students who borrowed extensively throughout undergraduate and graduate school and emerged with debts as high as $30-50,000 -- repayable at rates of interest in the range of seven to nine percent. Student contributions are generally high in Scandinavian nations, which have used student loans for many years as a device for allowing students to bear a substantial portion of living costs, even while all instructional costs are covered by taxpayers.[8]

In contrast, the student's share of the cost burden is very low in the United Kingdom, where students until this year have been officially expected neither to hold part-time jobs nor to take out loans. After years of struggle between proponents and opponents of student loans in the United Kingdom, a "Top-up" loan scheme is due to be introduced by 1990, ushering in the beginning of some officially expected student share of costs in that nation.

Elsewhere, students pay a portion of costs through some combination of loans or repayable grants (as in the zero interest, but repayable, BAföG grants in the Federal Republic of Germany) or term time and summer work. Student loans are also employed in the rest of Scandinavia as well as in Canada, Japan,

the Netherlands, and in a number of Latin American countries.

## HIGHER EDUCATION COSTS AND SOCIAL GOALS: EQUALITY OF OPPORTUNITY, EFFICIENCY, AND EQUITY

It can be assumed that all nations attempt to shape their higher education systems at least partly in pursuit of four social goals: equality of opportunity, efficiency, equity, and an optimal public investment in higher education. The costs of higher education -- total costs, unit costs, and the sharing of the cost burdens -- can affect substantially the way a nation's higher education system incorporates and balances these goals.

Equality of opportunity: Virtually all nations would profess that higher education ideally be partaken of by all those who can benefit sufficiently, without regard to family socioeconomic status, racial or ethnic background, or place or region of residence. In fact, all nations fall short of this goal, to a greater or lesser degree, to the extent that higher education attainment continues to be correlated with family background, even if that correlation operates through such supposedly relevant and reasonable attributes as academic achievement in elementary and secondary school, high academic aspirations, and well-developed study skills.

The first cost-related principle in support of equal opportunity is that potential students not be dissuaded from pursuit of higher education by virtue of their own or their parents' low incomes. This means that the cost to the student and family -- cost definitions E and F in Figure 1, or that portion of the total costs borne by the parents as shown in Figure 2 -- not be a barrier to attendance. This, in turn, means that more costs must be borne by the taxpayer rather than the parent, either by subsidies and grants to all students, or at least to students from families who could not otherwise pay, in the form of "means tested" or "need-based" grants.

In simple theory, governmental or taxpayer-borne grants to students just in the amount that their parents could be expected to contribute had they sufficient income should be sufficient to equalize opportunity. In practice, however, this may still be insufficient, particularly if the students are still expected to cover a portion of their costs through loans, and if, as has been alleged (in the United States, the United Kingdom, Canada, Federal Republic of Germany, and Scandinavia), students from low-income backgrounds are more averse to debt . . . or see the work place as a more viable alternative and therefore face higher de facto opportunity costs of foregone earnings than their counterparts from more affluent backgrounds . . . or are simply more ambivalent about higher education and are therefore less willing to sacrifice both the time and the assumption of debt.

The United States, which probably makes a greater effort than any other country to pull low socioeconomic youth into higher education, has a number of federal and state financial assistance policies that provide extra grant aid (i.e., that therefore require less from the student in the form of loans or term time work) for students from so-called "disadvantaged backgrounds" or who are from the racial and ethnic groups -- AfricanAmerican, Hispanic-American, or Native-American -- most underrepresented in higher education.

In most other countries, the barriers that seem to keep low income (or rural, or ethnic, or racial minority) youth from higher education operate primarily at the middle and upper years of secondary education, mainly by discouraging such youth from the academic secondary tracks or from secondary school altogether. Grants and other forms of assistance must therefore take effect at those levels, in an effort to break the intergenerational transmission of educational deprivation -- and then carry forward into the higher educational levels to accord such youth full opportunities.

Efficiency: Higher education, like any other good or

service, is efficiently produced to the degree to which a given level of outputs or benefits are being produced with the minimum level of inputs or resources, or costs. Because higher education's outputs are multiple (e.g., basic education, basic and applied research, career-specific training, national or regional service) and difficult to measure, "efficiency" has been an elusive and somewhat troublesome goal. Politicians, lay trustees, and others charged with the task of supporting higher education's unit costs often conclude that the enterprise could be made more efficient just by fitting more students into the classrooms, or by having professors teach an additional class or two, or by ridding the university of "frills," such as clerks, administrators, unread library holdings, and insufficiently-used space. Faculty and administrators are generally defensive about some of these attacks, claiming that such "efficiency" measures could do longlasting damage to both teaching and research, often in subtle ways that are hard to measure and impossible either to prove or to disprove.

Efficiency -- particularly as reflected in unit costs -- is a public policy issue particularly to the extent that higher education's costs are borne by the taxpayer rather than by parents, students or philanthropists. In the United States, the Reagan Administration, led by Education Secretary Bennett, attempted to make a major issue out of the very high private college costs that were being paid by upper-middle and upper income Americans.[9] Although American journalists and politicians have kept the charge alive, it has been blunted by the simple fact that there are very long waiting lists of students and parents eager to pay these annual $15-20,000 prices, in spite of abundant and highquality alternatives, at much lower cost to the family, in America's more heavily subsidized public higher education sector. Indeed, the only real test of "worth" in a market economy is what a willing and uncoerced buyer is glad to pay, and it is difficult, by this criterion, to associate high

cost with inefficiency.

Efficiency and unit costs are most problematic in the developing world, where: (a) costs are borne virtually entirely by the taxpayer; (b) most technical input/output ratios, such as students per faculty, are on the low (i.e., high unit cost, or "inefficient") side anyway; and (c) the consequences to governmental inefficiency, given scarce resources and enormous unmet public needs, are greatest. Tsang's 1988 review of cost analyses with particular reference to developing countries revealed their incredibly high unit costs, particularly in relation to, e.g., per-capita GNP or to per-capita public expenditures on elementary and secondary education, due to very high (relative) salaries in higher education, very low student-faculty ratios, and high perstudent capital costs.[10] The implication is that taxpayergenerated resources could be shifted from higher education to, e.g., secondary or advanced technical education, with a gain in social benefit. However, this conclusion is very much a function of prevailing units costs and of the distribution of the cost burden among students, parents, and taxpayers. If unit costs could be substantially lowered, possibly through increased numbers of students and through greater controls over, e.g., teaching loads and faculty salaries, and if the taxpayer-borne unit costs could be lowered even more by passing some of these expenses on to those families who could afford to pay, then the disparity between higher and secondary or primary education would be greatly lessened and a given level of public resources devoted to higher education could be made to seem more nearly optimal.

Equity: "Equity" in matters of public finance often refers to an appropriate balance between those who pay and those who benefit. In application to the costs of higher education, "equity" is often claimed to be advanced by those who benefit having to bear a substantial portion of the costs . . . and to be diminished as those who benefit, particularly if predominantly

from the upper-middle and upper classes, are effectively subsidized by those who largely do not benefit, predominantly from the lower socioeconomic classes, but who still bear a large portion of the costs through typically regressive taxes. The issue of equity, then, combines the issue of access, or equality of opportunity, with the issue of cost sharing, or "who pays?"

Jallade cites the common view of economists that public subsidies to higher education "...benefit mostly upper- and middle-class students while they are, at least partly, paid for by the taxes of lower-class families. In other words, the public subsidization of higher education may result in income transfers from the poor to the rich via taxation."[11] Psacharopoulos and Woodhall also survey the evidence and conclude that "...high levels of subsidy for education do not necessarily ensure equal opportunity and may even bring about undesirable transfer of income from the poor to the rich."[12]

Clearly, there is a potential for conflict in the pursuit of equal opportunity, which requires very substantial taxpayer-borne subsidization to remove financial barriers for the children of the poor or the geographically isolated or the otherwise by-passed, and the pursuit of both equity and efficiency, which suggest the appropriateness of the student and/or parents bearing at least some portion of costs, at least when they can do so without jeopardy to access. Equity is a problem to the degree that: (1) educational opportunities are heavily skewed to the advantage of children of the elite; and (2) those (elite) students receiving the benefit of higher education do so wholly or primarily at the expense of the general taxpayer (even if the taxes are entirely hidden through state control of prices and wages); and (3) the taxes are collected regressively, with a very heavy burden following on the working or peasant classes, as in consumption taxes or capitation taxes. By this construct, "equity" is a problem in most of the World, particularly in developing nations with a socioeconomic elite.

In contrast, equity is much less of a problem to the degree that: (1) higher education participation is more nearly equal among classes or regions or ethnic groups; and/or (2) the costly higher education that is partaken of by the elite is mainly paid for by themselves; and/or (3) the wage and tax system is mainly progressive, protecting at least the lowest income citizens from having to bear the costs of public subsidies to which they are unlikely to benefit.

## THE COSTS OF HIGHER EDUCATION IN FIVE NATIONS

This section describes the cost of higher education, including costs of instruction as well as costs to the student/family unit, in the United States, the United Kingdom, Japan, Australia, and Sweden. These nations were chosen for special attention because of their rich and varied recent histories in dealing with such issues as public and private sector costs, and apportioning the cost burden among parents, students, and taxpayers. In particular, each of the five is struggling with the issue of how to allow students and parents to bear an appropriate share of the costs of higher education without diminishing access and opportunity.

### United States

Higher education in the United States is carried out in approximately 1500 public institutions and more than 1800 private institutions, together in the fall of 1988 enrolling some 12,849,000 students, with a full-time equivalent value of about 9,178,000. For the purpose of international comparisons, higher education in America is characterized by:[13]

- o Enormous size: reflected not just in such absolute measures as enrollments or total resources devoted to the enterprise, but in the proportion of both youth and

adults going on to higher education, the proportion of total GNP or of state budgets devoted to higher education, or the capital and current operating resources available per student or per faculty member.

- o Egalitarianism and diversity of student body: reflected in minimal entry standards for most institutions; vigorous affirmative action recruitment of students from lowincome and minority backgrounds; substantial academic and personal support resources devoted to the remediation and counseling needed to retain traditionally under-prepared students; and almost unlimited opportunities to change institutions or academic programs, even after failure at one or more.
- o The importance of the private sector: Nearly one-half of all institutions, enrolling just over 20 percent of all students, are private non-profit corporations, owned and controlled by self-perpetuating bodies of uncompensated lay trustees, most depending substantially on tuition for operating expenses. The academic reputations, selectivity, endowment strength, and expenditures per student vary enormously within this sector, which includes the most prestigious, selective, and expensive institutions in the nation as well as a great many very small, unendowed, non-selective, and financially struggling colleges. Noteworthy, too, is a small but fastgrowing proprietary, or private forprofit, sector, specializing in very short-term vocational programs, most often for students with minimal academic preparedness, surviving on high tuitions covered with federal student assistance, some schools within which having been criticized for allegedly deceptive advertising and low-quality programs.
- o Decentralization and autonomy: The only significant

role of the United States Department of Education in United States' higher education is in the provision of student financial assistance. Public higher education is the province of the states, and even there the traditions of politically independent lay boards, strong campus chief executive officers, and academic freedom severely limit the authority of government over such matters as entrance standards, degree requirements, faculty hiring, and the curriculum.

- o Use of other-than-taxpayer-originated revenues: American higher education relies heavily on tuitions (from parents and students) and on private giving (from individuals, corporations, and foundations) to support both capital and current operating expenses in both the public and private sectors. American universities are even moving aggressively into such revenue producing activities as patent right development, real estate development, and the sale of products and services.
- o Aggressive marketing and price discounting: Because American higher education has such great physical capacity (some would claim it to be in excess of probable aggregate need) and has so nearly saturated the traditional market, and because of extensive campus autonomy and minimal regulation, campuses are competing fiercely for students, often with financial aid and price discounts, as well as with the traditional marketing devices of attractive catalogs, television and radio spots, and direct mail campaigns.

The Costs of Instruction. Instructional costs in the United States vary enormously, not simply by the usual dimensions of field (scientific/technical, social sciences or humanities), level (lower division, upper division, or graduate), and instructional mode (lecture, seminar, or laboratory), but also by the kind and quality of institution. In general, instructional

costs in the United States tend to be high, at least in mainstream institutions, because of high capital costs and extensive perstudent expenditures on administration, student services, public affairs, and academic support. Faculty salaries vary greatly, but tend to be relatively highest at the top-ranked research universities, both public and private, because of intensive competition for the most eminent scholars. Table 1 shows average per-student operating costs at different kinds of United States colleges and universities.

**TABLE 1**

**Per-Student Costs in American Higher Education, 1985-86**

| | Public | Private | Public & Private |
|---|---|---|---|
| Doctoral Granting With Medical School and Teaching Hospital | $15,530 | $23,724 | $17,573 |
| Doctoral Granting Without Medical School | 9,543 | 14,328 | 10,381 |
| Baccalaureate and Masters Inst. | 6,442 | 8,096 | 6,829 |
| Two Year Colleges | 5,160 | | |

Source: U. S. Dept. of Education statistics, 1985-86, compiled by State University of New York, Office of Institutional Research.

An intense, albeit often unenlightened, debate has been raging in recent years in the United States over high and supposedly "spiraling" costs. A combination of anger and genuine puzzlement has been fueled by the very high tuitions and fees at America's most expensive private colleges and universities, reaching $18,000 in 1988-89 just for tuition, room, board, and

required fees, and by strong public attacks upon these universities and their charges by former United States Education Secretary William Bennett. The issue is, in part, over the absolute amounts of these tuitions, and thus over the underlying per-student costs that the tuitions, augmented by endowment income and current gifts, presumably cover. But the real criticism, or at least the bewilderment, is aimed more at the annual rate of increase of these costs, which in recent years has been considerably in excess of the rate of inflation and even in excess of the annual rate of increase in faculty salaries.

The high-cost American colleges and universities point to the need for very high rates of faculty salary increase to cover the erosion of faculty salary purchasing power during the 1970s, and also to the sharp rate of increase in costs of such important university expenses as books, periodicals, scientific equipment, energy, printing and mailing, and institutionally-supported student financial aid. Critics concede these factors, but insist that the cost escalations could be contained if the institutions chose to compete at all on the basis of price; cynics, in fact, suggest that the price-demand curve may actually be inverted, or "backward bending," for some institutions that have raised tuitions in order to not appear cheap or second class, and for whom a high tuition is a mark of a high relative position within the pecking order of one's putative institutional peers.

On the other hand, for most public colleges and universities as well as for all but the handful of the most selective private colleges, the period since the mid-1970s has been a time of financial austerity. Cost measured in real terms -- faculty per students, janitorial staff per useable net square footage, faculty members per secretary, etc. -- tended to go down at most institutions. Also, new governmental regulatory and reporting requirements have been added to the staff burden, further increasing unit costs with no obvious rationale in enhanced quality. Increased competition for students has also driven up

the costs of bringing in a class -- not to mention the costs of financial aid, particularly if admittance is to be granted without regard to "need." Finally, declining academic preparedness of many students plus an enhanced concern for student retention has driven up the per-student cost for tutorial and other remedial services. In short, for most American colleges and universities, particularly in the financially hard-pressed public sector, instructional costs are anything but escalating out of control. At the same time, the financial disasters and massive closings that were predicted for higher education, and that brought dread into the hearts of faculty and trustees alike, have simply not been happening.

The Costs of Student Living. Costs to the American student and family vary according to resident or commuter status and according to the tuitions charged. Tuitions in 1988-89 range from $500-1000 per year in low-priced public colleges (especially two-year community colleges), to $1,000-2,500 in most public universities, to $6,000-8,000 at low- to moderate-priced private institutions, to $10,000-12,000 in high-priced private colleges and universities. Average total costs to students and parents in the United States in 1988-89 are shown in Table 2.

**TABLE 2**

**Costs of Student Living, U.S., 1988-89**

| | low-cost public commuter | average public univ. residents | average private univ. residents | high-cost private univ. residents |
|---|---|---|---|---|
| Tuition & Fees | $ 767 | $1,566 | $ 7,693 | $12,635 |
| Room & Board | 1,313 | 2,879 | 3,637 | 4,518 |
| Other Costs | 2,031 | 1,378 | 1,198 | 1,473 |
| Total | $4,111 | $5,823 | $12,528 | $18,626 |

Source: Higher Education and National Affairs, vol. 37 (1988), p.15, from the College Board's "Annual Survey of Colleges, 1988." Estimates for high-cost private universities from College Cost Book 88-89. (New York: The College Board, 1989).

Parents in the United States are assumed to be responsible for meeting a portion of the costs of their children's higher education, up to the limit of their financial ability as revealed by an officially-calculated expected parental contribution. The "expected parental contribution" is based on income and assets, but also takes into account the number of dependent children, both in and out of higher education, unusually high medical expenses, and the like. The expected contribution schedule for 1988-89 is shown in Table 3 for a two-parent family with one child in college and another dependent child not yet in college. Note that the expected contribution starts at an adjusted gross income of about $15,000 and then rises as incomes rise, still falling a bit short of the full cost at the most expensive universities for incomes as high as $85,000.

**TABLE 3**

**Expected U.S. Parental Contributions for Academic Year 1988-89 as a Function of 1987 Family Income (Adjusted Gross)**

**(Assume a family of four with two parents, the student and one additional dependent child.)**

| Adjusted Gross Income | Expected Contribution |
|---|---|
| $15,000 | 0 |
| 20,000 | 570 |
| 25,000 | 1,330 |
| 30,000 | 2,160 |
| 35,000 | 3,220 |
| 40,000 | 4,610 |
| 45,000 | 5,990 |
| 50,000 | 7,462 |
| 55,000 | 9,000 |
| 60,000 | 10,380 |
| 65,000 | 11,720 |
| 70,000 | 13,060 |
| 75,000 | 14,400 |
| 80,000 | 15,740 |
| 85,000 | 17,080 |
| 90,000 | 18,420 |

*Source:* Based on 1988-89 Congressional Methodology and Excluding any Special Considerations or Home Equity. See College Scholarship Service, Manual For Student Aid Administrators, 1988-89 Policies and Procedures (New York: The College Board, 1978). See also Federal Register Vol. 50, No. 67, April 1985, pp 13, 919-13, 923.

Most students will have some remaining need after the expected parental contribution has been received. This need is met from the following sources:

- o Expected student contribution from summer savings, term-time work, and/or loans. Loans may be as high as $7,000 annually for undergraduates, although annual undergraduate loans of that size are still unusual.
- o Means-tested grants from the following sources:
  - The Federal Pell Grant: $2,200 at its 1988-89 maximum, which begins to be reduced at a family income of about $12,225, and is effectively phased out for most students from family incomes over $32,000;
  - State need-based grants, modeled after the Federal Pell Program; and
  - Campus-based grant assistance, awarded at the discretion of the campus financial aid officer. The source of campus-based discretionary grant aid is likely to be a combination of the campus's own funds -- either from restricted gifts or endowments, or from current operating funds that the campus decides to divert into financial aid as a kind of "price discounting" -- or the campus's share of various other federal or state award programs.

Trends and Issues in United States Costs of Higher Education. The first issue is the steady and substantial rise in the underlying costs of instruction, at least in some (predominantly private) colleges and universities, and in the concomitant rise in tuitions and thus in the total cost burdens passed on to students and parents in these institutions. Much of the concern, however real, seems misplaced or exaggerated, at least to the economist. In the first place, neither the costs of instruction nor the costs passed on to students and parents have

been increasing in an out-of-the-ordinary rate in most colleges or universities, either public or private. Second, a rate of increase that is slightly above the consumer price index -- which is, after all, only an average of many price increases -- should not be unexpected, particularly in a labor-intensive industry like higher education in which wage and salary increases tend to drive the underlying unit cost increases, unameliorated by the substitution of capitol for labor or by other examples of classical productivity increases. Finally, the fact that the highest-priced colleges tend to be oversubscribed with willing consumers suggests that these institutions are adding to their costs by adding services and amenities desired by the student and their parents. In short, the levels of, and rates of increase in, costs to students and parents in the United States may be a major political or public relations problem, but may also not be such a major substantive issue.

A second issue in United States higher education financing is the fragility of the parents' share in meeting the costs of instruction and student living. This may stem partly from what some believe to be a diminished willingness of parents to sacrifice -- i.e., to save in anticipation of their children's college costs and to make downward adjustments in their living standards during the college years. But the principal problem is more the demise of the 18-22 year-old dependent student from a stable two-parent home as the dominant model of the American student. As more and more students are products of single-parent homes, or of other situations in which parental financial responsibility is problematic, not to mention the very great numbers of students who are in every way "adult" and independent from their parents, the expected parental contribution becomes less and less secure as the foundation for meeting a substantial and predictable share of the costs of tuition and student living.

The third issue affecting United States' higher educational finance is a steadily increasing reliance on student loans, with

a concomitant erosion, at least in the first half of the 1980s, in the constant dollar value of governmental grants.[14] Although there has been a recovery in aggregate spending on grants from 1985-86 through 1987-88, public perception in the United States is that federal student grants have been decimated during the 1980s. While facts do not bear out the perception, the generally unsupportive, and sometimes even hostile, proclamations of the Reagan Administration toward higher education and federal support thereof led many to conclude, erroneously, that the federal aid budget was plummeting throughout the 1980s. At the same time, the very great increases in federal need-based grants to students in the proprietary sector has meant a diversion of grant aid away from students in the public and private not-for-profit, degree-granting institutions.

A fourth issue in the United States is the mounting concern over debt loads and the related problems of defaults, alleged distortions in career choices (presumably as a result of fear of unmanageable repayment burdens), and a resurgence of interest in new forms of student loans that would be both more impervious to default and less of a repayment burden on the student borrower. These latter criteria have led to a rekindling of interest in tying loan repayments either to federal income tax withholding or to federal Social Security contributions, and also in setting the repayment obligation as a percentage of earnings.[15] However, the size and complexity of the existing student loan establishment -- 50 state guarantee agencies, thousands of participating banks, $50 billion of outstanding student loan paper, and an annual volume of new lending estimated at more than $12 billion in 1988 -- make the changeover costs of a total revision of student lending exceedingly high. Furthermore, certain reforms, like longer repayment periods, income contingent repayment deferments, and more loan origination by qualified campuses, may all be possible within the existing federally guaranteed student loan program. The Congress will revisit all of the federal higher

education student assistance programs in 1989-90, but reform and patching are more likely than radical restructuring.

The United Kingdom

Higher education in the United Kingdom includes the 46 publicly-funded and one privately-funded universities, which are autonomous corporations, many with substantial endowments, and those institutions collectively referred to as "the public sector," including 30 polytechnics in England and Wales, 14 Scottish Central Institutions, and a large number of voluntary colleges and other institutions, many of which are only partially engaged in what international parlance would designate as "higher education." The descriptions below will deal with England and Wales, as Scotland and Northern Ireland are treated differently, although comparably.

The Costs of Instruction. Institutional, or instructional, budgets in the United Kingdom are relatively high on a per-student basis because of comparatively low student/faculty ratios and high student support expenditures. Sources of support for instructional costs include:

- o endowment income (primarily the older universities);
- o tuition for home (i.e., United Kingdom resident) students, which is rather arbitrarily set by the Government and then paid automatically directly to the institution, constituting about 5 percent of University income and about 12 percent of polytechnic income;
- o tuition from overseas students, established at "full cost" in 1980, which must be collected by the institution and which is increasingly perceived as a significant source of institutional discretionary income; and
- o Government grants, which constitute the major portion of support.[16]

Unit costs throughout all of the United Kingdom higher education have been declining in real terms throughout the 1980s, driven down by the failure of government support to keep up with the costs of higher educational inflation and the absence of any other income source able to expand enough to take up the slack. The policy of the Thatcher Government, as revealed in the latter half of the 1980s, has been to:

- o continue emphasis on improved productivity and management;
- o diversify sources of support, with incentives to increase income from sponsored research, private giving, and tuition from overseas students;
- o encourage curricular and programmatic responsiveness to the needs of the United Kingdom economy; and
- o encourage participation from women, adult students, and others less well-served in the past.[17]

Governmental support is undergoing a wrenching change at the time of this writing. Under a plan formally unveiled in an April 1987 white paper and incorporated in the Educational Reform Act of 1988, the polytechnics and colleges are to be set free from local education authority ownership and established as public corporations. Their government funding will be through contracts established with a new (1989) Polytechnics and Colleges Funding Council. The universities, which have been forward funded by quinquennia through the autonomous University Grants Committee, are soon to be funded through a new entity, to be called The Universities Funding Council, which will have greater input from the Government and be more subject to annual fluctuations in aggregate taxpayer-borne funds depending on overall governmental priorities and availability of funds.[18]

The Costs of Student Living. The allocation of student maintenance costs among parents, students, and taxpayers in the United Kingdom is also about to undergo a major change, again reflecting a long-sought Conservative Government policy of moving

a portion of these costs from taxpayers and parents on to students in the form of loans. Under the current system, which dates back to 1962, nearly all full-time home (non-overseas) students are eligible for means-tested Mandatory Grants that cover all or most of the costs of room, board, and other necessary expenses for the academic year without the need, at least according to official policy, for any student-borne support in the form of loans or term-time work. For 1988-89, these grants were:[19]

- o Resident students, London: £2425 ($4,558)
- o Resident students, elsewhere than London: £2050 ($3,853)
- o Commuter students: £1630 ($3,064)

The actual expenses incurred by students according to governmental surveys are approximately £2,800 ($5,263), with additional support coming from various social welfare grants, non-governmental loans, and student savings.

Mandatory Grants are "means-tested," that is, reduced according to a schedule of expected parental contributions (also spouse earnings and students' unearned income) that begins at a "residual income" in 1988-1989 of £9900 ($18,609) and peaks -- that is, yields the maximum amount expected, in the range of £25-27,000 ($46,992-50,752). The means testing has become increasingly severe throughout the 1980s, while the maximum amounts have failed to keep up with rising costs. The result has been an increasing burden on parents who do pay the full expected contribution plus some gap, still, for their children, as well as significant problems for students where parents fall short of meeting the full expected contribution.

The Government's new policy and program, announced in November 1988 and scheduled to take effect in 1990, is:

- o to exclude students from most social welfare benefits (unemployment, housing, and income benefits), which some 77% of United Kingdom students were drawing on by

the late 1980s;

- o to freeze both the expected parental contribution and the Mandatory Grants at their 1990-91 levels -- thereafter reducing their real levels as inflation continues to escalate the costs of student living; and
- o to introduce a governmentally-sponsored or guaranteed loan program, initially to cover the costs of lost social welfare benefits, missing expected parental contributions, and other expenses not fully covered by the current level of Mandatory Grants, but over time to replace the steadily declining real value of taxpayer- and parental-borne contributions until the student-borne share of living costs, covered primarily by loans, are equal to the combined parent and Mandatory Grant support.[20]

It was anticipated as of early 1989 that the loan program would bear a variable rate of interest equal only to the rate of inflation (i.e., a zero real interest rate) and would have some "income sensitivity" to the repayment burden. Such income sensitivity could either defer repayments altogether when they exceeded a certain proportion of the repayer's income, or establish the entire repayment obligation as a percentage of income, with some maximum repayment provision. It was also anticipated that the loan program would extend to certain students -- such as part-time students or those taking a second course of study -- who are currently excluded altogether from Mandatory Grants and thus have no governmentally-sanctioned assistance.

Loans and the concomitant erosion of taxpayer-borne grants have been fought bitterly and long by British students, and the opposition continues at the time of this writing. As of Spring 1989, British banks were exhibiting little enthusiasm for an American-style program in which banks would originate, capitalize, and service the loans, with the Government acting

only as guarantor and source of necessary subsidies. Details, therefore, remain uncertain, and the "Top-up loans" may even be temporarily stalled. But the Government's long-expected program of further reducing the taxpayer's contribution to institutional costs, encouraging entrepreneurship and a diversification of institutional income, and moving the burden of student living costs away from the taxpayer and at least partly onto the student seems to be underway for the 1990s.[21]

Japan

Japanese higher education is carried out in nearly 500 senior colleges and universities, two-thirds of which offer graduate and advanced professional education, enrolling in 1987 some 1.9 million students, plus just over 500 two-year junior colleges, with about 437,000 students, nearly all of whom are studying in terminal degree programs, with no transfer possibilities into a senior college or university. The most striking feature of Japanese higher education is its heavy reliance on a large, governmentallysubsidized private sector, accommodating 75 percent of the students (72 percent of those in the senior colleges and universities and 91 percent of those in junior colleges) and having had to shoulder nearly all of the burden of expansion and access since the war and occupation. The public sector includes the prestigious national universities, with most of the advanced scientific and technical programs, plus some locally-sponsored municipal institutions. The public universities are better funded, less expensive to the student, and more prestigious; admittance is extremely competitive, and the national universities attract the most academically competitive and ambitious students.

In 1970, Japan began to address the financial and social anomaly of a small, heavily taxpayer-funded, public sector, carrying very low tuitions and catering to the most able students

-- who were, not surprisingly, predominantly middle and upper-middle class -- and a financially strained, but expensive private sector, which had had to accommodate the rising educational aspirations of the rest of the population and to meet much of the needs of Japan's burgeoning economy. A Current Cost Subsidy was instituted in 1975 to relieve private sector budgets and presumably to hold down tuition. This subsidy increased to account for as much as 24 percent of private institutions' revenue in 1979, but has since declined to about 15 percent in the late 1980s.[22] Perhaps because of the decline in the Current Cost Subsidy in the 1980s, tuitions in the private sector did not stabilize, and by 1985 averaged more than ¥753,000 ($6,000).[23]

At the same time, taxpayer support to the public sector began to decline and public tuitions also to rise. Direct governmental support as a percent of national university revenue declined from 77 percent to 63 percent between 1977 and 1987; tuition revenue rose from 3 percent to 9 percent in the same period.[24] By the late 1980s, the disparities between the public and private sectors in both institutional costs and costs to parents and students had narrowed considerably. The public sector remains, however, much better funded -- as measured by, e.g., student-faculty ratios or operating costs per student or faculty member -- and also much less expensive to the parents and students.

The Costs of Instruction. Per student costs of instruction in the public sector averaged approximately ¥1,426,000 ($9,900) in 1985; this unit cost figure has remained essentially constant since the 1970s after adjusting for inflation. Because a true "steady state" generally assumes some rising real unit costs in education, as elsewhere in the public sector, this statistic probably reflects some reductions in the real resources available to Japan's public universities -- an observation supported by the fact that the unit costs dropped as a percentage of per-capita income from 86 percent in 1975 to 65 percent in 1986. Per-

student costs of instruction in the private sector in 1985 averaged ¥1,043,000 ($8,300) -- a figure that was approximately double that of the early 1970s, illustrating the narrowing instructional cost gap between the two sectors.[25]

The Costs of Student Living. The cost of a university education to students and parents in Japan is considerable, due to high living costs generally and to the need for substantial tuition in the private sector and not inconsiderable tuition in the public sector. As seen in Table 4, estimated average costs in 1988 ranged from ¥790,500 ($6,300) for those commuting to a public university to ¥1,779,900 ($14,200) for those residing at a private university.

Parents are expected to contribute very substantially to the higher educational costs of their children, either from current income or savings or through the assumption of all or part of the repayment burden of student loans. Financial assistance to

**TABLE 4**

**Higher Education Costs to Parents and Students in Japan, 1988 (Estimated)**

| | Public Sector | | | | Private Sector | | | |
|---|---|---|---|---|---|---|---|---|
| | Commuter | | Resident | | Commuter | | Resident | |
| | ¥ | $ | ¥ | $ | ¥ | $ | ¥ | $ |
| Tuition & Fees | 200,787 | 1,601 | 187,239 | 1,493 | 595,506 | 4,748 | 663,903 | 5,294 |
| All Other | 589,713 | 4,702 | 1,069,400 | 8,527 | 597,893 | 4,768 | 1,115,997 | 8,900 |
| Total | 790,500 | 6,304 | 1,256,640 | 10,021 | 1,193,400 | 9,516 | 1,779,900 | 14,194 |

*Source:* Kaneko, Japan, p. 77, Table C-8. Kaneko's 1984 figures were extrapolated to 1988 estimated by assuming growth equal to the rise in Japanese consumer prices, or about 2 percent from 1984-1988. Assume $1 = ¥125.4

students in Japan is through governmental loans allocated by the Japan Scholarship Foundation to universities and colleges, then awarded by faculty panels to students on the basis of academic achievement and financial need. The most sought after loans are interest free, and were awarded in 1986 to about 200,000 students, or 11 percent of all undergraduates. (The absence of interest, coupled with long repayment periods averaging 11 years, but going as long as 20 years, constitutes a very substantial effective grant, calculated by the present value of the repayment subsidy stream and amounting to approximately 75 percent of the amount of the loan, assuming an 8 percent discount rate.)[26] Students failing to receive interest-free loans may still be awarded 3 percent loans, 54,000 of which were given out in 1986. Further supplemental loans at 6.5 percent interest are available for medical and pharmacy students. Loan amounts are shown in Table 5. Although these amounts differ by public and private

**TABLE 5**

**Loan Amounts Granted by The Japan Scholarship Foundation, 1986**

| Sector and Student Status | Amount Per Month | |
|---|---|---|
| | ¥ | $ |
| Public, Commuter | 28,000 | 207 |
| Public, Resident | 32,000 | 255 |
| Private, Commuter | 35,000 | 279 |
| Private, Resident | 45,000 | 359 |
| Doctoral, Resident (Public) | 80,000 | 638 |

Source: Kaneko, Japan, p. 71, Table C-2. Assume $1 = ¥125.4

sector and by commuter or resident status, the loans are insufficient by themselves to meet the full costs of student living, covering only about one-third of total costs for commuting students, in either sector, and between 25 and 30 percent of the costs associated with living away from home.[27] Additional sources of income must therefore be found -- presumably from parental contributions, nongovernmental grants and loans, or student part-time work.

Although financial need is the primary consideration in the awarding of the loan, it is not determinant, nor does need affect the amount of the loan. Students of equal financial need (i.e., on the basis of a North American or European means test) may receive a loan or not, depending on their grades and other measures of academic potential. Similarly, students of unequal financial need but equivalent high academic potential can receive the same loan on the same highly subsidized terms. Thus, taxpayer-borne assistance is related to, but is not a direct function of, financial need as measured by a means test or formal need analysis. At the same time, the tradition of parental support for their children's higher education is extremely strong in Japan, extending to much parental assumption of student loan debt, and it is likely that actual contributions nevertheless reflect a traditional-but-severe "means test."

The problem in the Japanese system of student financial assistance is its relatively weak contribution to expanded access or equalizing opportunities -- for example, among children of rural backgrounds or lower income families. Students of modest measured academic ability and high financial need, as revealed by their parents' low incomes, will have the double burden of being unlikely to be admitted to the public sector, and therefore having to face the much higher priced private sector, and being unlikely as well to qualify for a subsidized student loan.

Trends in Japanese Higher Educational Finance. Some likely trends in Japanese higher educational finance in the 1990s are:

- an accelerated encouragement of more diversified sources of financial support to higher education -- particularly from philanthropy, business support, and the sales of services;
- more generous financial assistance to students, particularly those attending the higher-priced private institutions;
- some sharper focusing of taxpayer-borne financial assistance on the most needy; and
- more attention to the financial needs of academically average and below average students and to the needs of the private institutions that serve them, and generally to the goals of more equal opportunity and socioeconomic diversity in the student population.

Australia

Higher education in Australia consists of the 19 universities and 37 colleges of advanced education (CAE), with a third sector, the technical and further education (TAFE) institutions, straddling the secondary and tertiary levels. Higher education has historically been the province of the Australian states, although nearly all governmental funds, and thus predominate control, has been exercised through the national government. The current (1989) reform plan would reduce the number of institutions and consolidate them into a unified national system.[28]

The Costs of Instruction. The universities and colleges experienced considerable austerity from the mid-1970s through the mid-1980s, with increasing enrollments and the increasing costs of such items as equipment and books outpacing the governmental operating grants. In 1987, the average per-student cost was reported to be about A$10,000 ($7,225 U.S.).[29] This is a unit cost comparable, on the whole, to the United States, United

Kingdom, and Canada.

The Australian Government in December 1987 released a discussion paper with proposals to reform both the finance and the governance of higher education. The official platform was promulgated in July 1988 in Higher Education: A Policy Statement. Its goals include increasing enrollments; increasing participation of low-income, rural, and Aboriginal youth; reorienting programs to better serve the needs of the Australian economy; more autonomy and management flexibility to individual institutions; and instituting a system of assessment according to performance indicators. Of relevance to the issues of cost and productivity is the new policy establishing minimum full-time equivalent student enrollments in order to qualify for continued national recognition and funding: 2,000 for a small specialized institution; 5,000 for a "broad teaching profile and some specialized research;" and 8,000 minimum full-time equivalent students for a "relatively comprehensive involvement in teaching and research." Twenty-one institutions with below 2,000 enrollment must try to consolidate with another or attempt to be absorbed into the state technical school system, and those in the range of 2,000-5,000 have been served warning.[30] The purpose of the new policy is, in part, to control instructional costs by eliminating financially unviable schools, narrowing the range of government subsidy per unit, and putting more management pressure on the individual campuses to reallocate resources and improve efficiency.

The Costs of Student Living. Tuition in Australian higher education was abolished in 1974, having previously covered approximately 15 percent of course costs, although only 20-25 percent of full-time students actually had to pay. Along with abolishing tuition, and in a further effort to increase the higher education participation of low-income, rural, and Aboriginal youth, the government instituted a means-tested, cost-of-living allowance entitled Tertiary Education Assistance

Scheme (TEAS). However, the fiscal austerity of the ensuing decade eroded the real value of TEAS. The proportion of full-time students receiving TEAS declined, and there was no significant improvement in low-income or minority participation.[31]

TEAS and other secondary and tertiary support schemes were replaced in 1987 by AUSTUDY, a comprehensive system of maintenance grants for post secondary students. AUSTUDY supplies a weekly allowance for full-time students as shown in Table 6,

**TABLE 6**

**AUSTUDY: Australian Student Living Allowance, 1989**

| | Weekly | | Full Year | |
|---|---|---|---|---|
| | $ Australian | $ U.S. | $ Australian | $ U.S. |
| Commuter | 64.30 | 48.00 | 3,343.60 | 3,477.00 |
| Residential and Independent | 97.70 | 72.00 | 5,080.00 | 3,763.00 |
| Adult Special | 116.00 | 86.00 | 6,032.00 | 4,468.00 |

*Source:* AUSTUDY 1989, Australian Department of Employment, Education, and Training. 1988 1st quarter exchange rate $1 U.S. = $1.35 Australian

assumed to be sufficient to handle living costs -- although not the new additional costs to be levied beginning in 1989 as a kind of partial tuition under the new Higher Education Contribution Scheme, discussed below.

The AUSTUDY cost-of-living allowance is means-tested against parental, spouse, and own income and assets. In 1989, the maximum AUSTUDY grants shown in Table 6 began to be reduced at a taxable income, before adjustments (here assumed to be a

two-child family, with one college student and one non-student dependent), of about A$18,160 ($13,444 U.S.). The reduction is at a 25 percent "tax rate," which phases out AUSTUDY in a family with a student living away from home and another non-student dependent at an income of about A$57,309 ($42,541 U.S.).[32]

In 1986, a new student fee was levied, entitled The Higher Education Administration Charge (HEAC), set in 1988 at A$263 ($195 U.S.). This charge was included within the costs that entered into the AUSTUDY award, so that only about 60 percent of the students actually paid HEAC in full; nevertheless, the new charge was akin to a partial resumption of tuition, and signaled the Government's desire to begin shifting some of the costs of instruction from the taxpayer to the student and family.

A still more far-reaching modification in student charges and support was recommended in 1988 by the Government's Committee on Higher Education Funding under the chairmanship of Neville Wran, MP. The Wran Report observed that the middle and upper-middle class were benefiting disproportionately from higher educational subsidies and that the system was in need of new resources, but that it was neither equitable nor politically realistic to expect large amounts of additional support from the general Australian taxpayer. The conclusion, therefore, was that the student recipient would have to pay more -- without jeopardizing the goal of enhanced access.

The Wran Committee considered -- and rejected -- such devices as vouchers, loans, and the graduate tax, and recommended instead what it termed "tax debits," to be incurred by all students.[33] Introduced as the Higher Education Contribution Scheme in January 1989, the new plan requires each student to pay A$1,800 ($1,333 U.S.) for a year's full-time study, equal to about 20 percent of costs, that amount to escalate each year in accord with inflation. The Higher Education Administrative charge is to be abolished. A student can pay "up front" with a 15 percent discount, or else elect to pay a percent of income

(one, two, or three percent), until the debt is repaid depending only on the annual income (not on the amount borrowed). No amount is owed if income is below the mean Australian income level of $22,000. The outstanding debt will be adjusted upward each year for inflation, so that the amount repaid is exactly what was "borrowed" in real terms.[34]

Trends. The current Labour Government seems determined to expand higher educational places and access, but to do so at less cost to the Australian taxpayer by shifting more of the instructional costs to students, with the convenience and protection of an income-contingent repayment scheme.

## Sweden

Sweden in 1977 brought its seven universities (including The University of Agricultural Science, under The Ministry of Agriculture), its 28 university colleges, and the more than 30 locally-administered institutes into a unified system for planning, finance, and control. The six universities under The Ministry of Education and Cultural Affairs form the foci for the country's six Higher Education Regions.

Higher education in Sweden is highly centralized, with Ministerial and Parliamentary control extending even into the undergraduate curriculum. Rational planning and manpower considerations play a more prominent role than in most other West European or North American countries. The needs of adult and other non-traditional learners are given much attention, extending to special admissions provisions for those over the age of 25.

The Costs of Instruction. Sweden is a wealthy, stable, homogeneous nation with long traditions of cultural and governmental support for higher education and research. The Social Democratic priority on public spending has provided relatively stable support to higher education even during the

1980s, when so many nations and public higher educational systems were experiencing financial austerity.

Unit costs in the mid-1980s were in the range of SEK25-30,000 ($4250-5100) except in the low-cost social science disciplines and professions. Student-faculty ratios in 1982-83 were reported as: 8 for the health professions; 9 for science and engineering; 12 for teacher training; 21 for information, communication, and culture; and 30 for administration, economics, and social work.[35]

The Costs of Student Living. Sweden has been perhaps the leading nation in the world in the provision of subsidized student loans to cover, along with grants, the costs of student living.[36] The program, begun in 1965 under the English title "Study Means," provided an amount keyed to the inflation-indexed pension unit (thus increasing automatically as prices rose to keep a constant real value), 25 percent of which was a grant, the remainder of which was a loan. All expected parental contributions were eliminated, so the only means-testing was a reduction of the Study Means based on one's own, and at the outset one's spouse's, incomes and assets. A student accumulated a debt of so many pension units, which aggregate sum was then divided into equal portions between the year of initiation of repayment and (usually) age 51. The fraction of a pension unit owed each year was converted into monetary terms by that year's inflation index. The result was a loan that was repaid fully and exactly in real terms, with the annual inflation index serving as a proxy for interest.

The program underwent some planned changes in 1977, as well as some unplanned ones throughout the 1980s. The pension unit, or base amount, was continued as a guide for the initial award: 145 percent in 1988, or SEK37,430 ($6,368) for a nine-month academic year. The repayment terms, though, reverted to an interest rate, albeit subsidized (4.2 percent from 1982-1988), which was tax deductible and which then further lowered the net

cost of borrowing. The repayment schedule was graduated over time -- a 4.2 percent increase in annual payments -- which made it "income related," even if not strictly "income contingent." Spouse income and assets were removed from the means test, a measure with the primary intended purpose of making the eligibility of a woman for assistance independent from the income or assets of her husband.

The grant portion of the award remained fixed at its 1980 amount of SEK2178 ($370), so that the entire increase over the years since had to be taken up by the loan portion -- by 1988 SEK35,252 ($5997), or 94 percent of the total SEK37,430 award, as contrasted with the 25 percent established at the outset of the program. The result of the encroachment by the loan portion was an increase in debt loads that was alarming to many policy makers, particularly given Sweden's relatively flat incomes, which provide little immediate private monetary payoff to the individual investment in a university education.

Finally, the actual costs of student living -- housing, food, books, entertainment -- were generally thought to have risen faster than the increase in the indexed pension unit, or base amount, so that the standard of living of the Swedish student, if dependent solely on Study Means, probably declined during the 1980s. The expectation in Sweden is that students should be able to live at or near the standard of living of their non-student age peers. This expectation, plus the increased number of older students, meant that the total available study means -- irrespective of portion that had to be taken in the form of a loan -- was thought to have become increasingly insufficient.

The Study Assistance Reforms of 1989. A comprehensive reexamination of the student award system began in 1986, followed by governmental action in the Spring of 1988 and implementation of far-reaching changes beginning in January 1989. The key provisions of the new scheme, given the English name "Study

Assistance," are as follows:[37]

- The total award was increased to 170 percent of the pension unit, or base amount, estimated to be SEK43,840 ($7,458) for 1989.
- The grant portion of the augmented award was increased to approximately 30 percent, or about SEK12,900 ($2,195) for a nine-month academic year.
- The grant portion and the total Study Assistance award are both to be indexed to increases in the pension unit, or base amount, thus preventing in the future the kind of erosion of the grant portion that happened in the 1970s and 1980s.
- The only means testing is a reduction of the award, beginning with the grant portion, of 50 percent of students' own incomes in excess of SEK34,000 ($5,784). Students' assets are no longer taken into account, nor are either incomes or assets of parents or spouses.
- The loan portion bears a variable interest rate of one-half the Government borrowing rate, plus a small administrative charge. This interest, which is no longer to be deductible from income for the purpose of tax liability, will be approximately equal to the net after-tax cost of borrowing through conventional loans.
- Repayments are income contingent: 4 percent of the borrower's prior year income, regardless of amount owed. Any debts remaining after the age of 66 or upon death or permanent disability are cancelled.
- Borrowers who incurred obligations under Study Means prior to January 1989 will be able to convert remaining repayment obligations to the new income contingent Study Assistance scheme.
- Unlike "Study Means," which prior to 1989 was charged in full to the national budget as a current expense, even though most of it was in the source of interest-

bearing assets, the 1989 "Study Assistance" will charge to the national budget only the grant portion and the (presumably present value of future) interest subsidies and write-offs, with the true loan portions financed "off budget," through a National Debt Office.

**TABLE 7**

**Loan Repayments and Repayment Periods For Swedish Income Contingent Loans Under Alternate Assumptions of Starting Income and Annual Income Growth**

| First Year Income SEK | Annual Increases in Income % | 1st Annual Payment (Year 2) SEK | 9th Annual Payment (Year 10) SEK | Last Complete Payment in (Year) SEK | Repayment Ceases During Year . . . |
|---|---|---|---|---|---|
| 80,000 | 7 | 3424 | 5,883.1 | 15,169.1 (24) | 25 |
| | 9 | 3488 | 6,950.1 | 18,453.3 (20) | 21 |
| 100,000 | 7 | 4280 | 7,353.8 | 14,466.1 (20) | 21 |
| | 9 | 4380 | 8,687.6 | 15,881.2 (17) | 18 |
| 125,000 | 7 | 5350 | 9,192.3 | 14,780.8 (17) | 18 |
| | 9 | 5450 | 10,859.5 | 16,708.6 (15) | 16 |

**ASSUME:** — Student takes full Study Assistance of SEK 43,840 in first year of study, SEK 30,940 of which is a loan, and which increases by 4% in each of study years two and three, accruing interest at 4% per annum.

— Aggregate debt at completion of study (year three) SEK 101,900.

— One year deferment before initiation of repayment; amount owed continues to accrue interest at 4%.

— Repayments are 4% of prior year income, beginning in repayment year two.

Table 7 shows the general shape of income contingent repayments on SEK101,900 ($17,336) under different assumptions of starting incomes and annual income growth. A graduate whose starting salary is SEK100,000 ($17,000), which increases at a compound rate of 9 percent per annum, will make a first payment in the second year after graduation of SEK4360 ($742) and a last

full payment of SEK15,881 ($2,702) in the 17th year after graduation, leaving a final partial payment to complete the repayment obligation in the 18th year out of school.

Sweden has thus become the first nation to install a comprehensive student loan program with income contingent repayments. Unlike some versions of this concept, the Swedish program provides no mutualization of debt burden risk. That is, high earners merely repay their loans faster, at the contracted variable rate of interest (reset annually at one-half of the current Government borrowing rate), and do not pay anything "extra" with which to cover possible eventual underpayments by low earners. The write-off expenses of those low earners who reach the age of 66 not yet having paid off their debts in full are charged to the general Swedish taxpayer.

For most graduates with debts -- and it is important to note that in Sweden this means most graduates -- the actual effect of the new repayment scheme may not be as great as the profound difference in the legal and technical nature of the repayment obligation. Accumulated debts should be a bit smaller because of the larger grants and smaller loan maxima. Interest rates net of income tax consequences should be slightly higher. The pre-1989 repayments were graduated at a 4.2 percent upward slope, roughly approximating expected growth in incomes, although probably at too gentle a rate of increase. The new repayments will increase precisely in accord with the growth in the individual borrower's income. Low earners in the old "Study Means" scheme (in 1988, borrowers with annual income below SEK90,300 [$15,362]) had required repayments deferred, with any debt remaining at age 65 cancelled; the new "Study Assistance" scheme does not defer payments, but automatically lowers payments in the event of low earnings, maintaining the constant 4 percent of income repayment burden, similarly cancelling any debts remaining at age 66.

In short, the new Swedish loan plan is a move toward lower average debt loads, slightly less subsidized repayments, annual

repayments that are precisely a function of the borrower's own (prior year) income, and a repayment period that, for any given income stream, is a function of the amount of the initial debt. The entire new Swedish Study Assistance Program is also a move toward somewhat more generous assistance and considerably more generous grants.

## INTERNATIONAL TRENDS IN THE COSTS OF HIGHER EDUCATION

Recognizing trends and projecting their future trajectories is both difficult and risky, even for a single nation. Truly international trends are even more elusive. Nevertheless, there seem at least to be some generalizations about costs, including both the costs of instruction and the costs of student living, that one can draw from the experiences of the nations described in this chapter and elsewhere.

1. Aggregate expenditures will increase in real terms. Most nations -- with the United States and possibly Canada being the only likely exceptions -- will face substantially increased demand for student places in their colleges and universities. If a likely saturation point to higher educational demand is in the vicinity of the current United States' experience (some 40 percent of a population cohort going on to some form of higher educational experience), then Europe and the rest of the developed world has considerable aggregate growth pressure ahead of it, made less acute in the 1980s only because of the demographic downturn in the number of 18 and 19 year olds. The needs of increasingly technological economies, the ethical and political imperative for equalizing opportunity upwards (that is, more access to higher education for the less privileged, rather than less access for the already privileged), and the upturn in the number of graduates from the academic secondary schools will put further pressures on the higher educational systems of most developed nations to expand higher educational capacity. The

less-developed nations, most of which begin with small higher educational capacity anyway, in addition to having far higher birth rates and thus lacking any demographic offset, will experience even greater pressures for increasing higher educational capacity and expenditure. The cost of this expansion will be magnified by the high and increasing unit costs of academic equipment, library materials, specialists, and other ingredients in higher education's input mix.

2. The underrepresentation of children from less privileged socioeconomic classes will remain a great problem in all nations. This will place additional cost pressures on the universities and on the higher education ministries, both for enriched academic experiences and for the support of those student living expenses that are unlikely to be met from parents.

3. The aforementioned pressures to spend more on aggregate higher educational capacity as well as more on a per-unit basis will be resisted by increasing pressures from governments (taxpayers) to lower unit costs and to become more productive. The substantial appetite of higher education will increasingly be in direct competition with society's equally large, or sometimes even larger, appetites for a cleaner and safer environment, for more social equality, for public subsidies on behalf of economic growth and international technological competitiveness, for public assistance to the arts and culture, and for more and better health care -- some clearly as compelling as the case for higher education -- not to mention the pressure for tax relief. Faculty will be asked to teach more students or more hours or both, and students will be asked to attend classes and to occupy the facilities for more hours of the day. This kind of pressure is clearly evident in the United States, Western Europe, Canada, and Australia, and can also be perceived in China and the Soviet Union and other more centrally planned economies. Nowhere is the need for higher education productivity greater than in the developing world, particularly in regions like Francophone West

Africa, where very high faculty salaries, low teaching loads, high support costs, and the absence, as yet, of any significant economies of scale has given rise to unit costs that almost certainly cannot be sustained.[38]

4. Technology, while strikingly unsuccessful in altering unit costs -- or even altering teaching methods to any significant degree -- in Europe and North America, may play a role in the cost-effective expansion of higher education in Asia and perhaps in sparsely populated regions of Australia, the Soviet Union, Canada, Brazil, and parts of Africa. Technology -- principally, radio, both broadcast and recorded television, and tele-linked computers -- can make possible "distance teaching," by which a small staff in a central location can manage the individually-paced learning of a great many persons in diverse and often remote locations. There are heavy start-up costs, so the cost-effectiveness of educational technology is sensitive to enrollments.[39] But Kaye reported much new activity in the mid-1980s in China (The Central Radio and Television University, established in 1979 and reported by the mid-1980s to be reaching more than 600,000 students, with all radio and television courses reaching about 40 percent of the student population), in the USSR (1,200 distanceteaching institutions reported in 1983 to be reaching 1.5 million students, or about 30 percent of the student population), in Korea (250,000 students registered in The Correspondence University), in Indonesia (planning to reach 500,000 students in its Open University by 1990), and elsewhere.[40]

5. Higher education will become increasingly differentiated. The hegemony of the classical western comprehensive research university will continue to give ground to more aggressive and more quickly adaptable alternatives that are less selective, more applied, oriented more to teaching than to research, and less controlled by the professoriate. These alternatives include community colleges, comprehensive colleges,

and even vocational proprietary institutions in the United States; polytechnics in the United Kingdom; Fachhochschulen in The Federal Republic of Germany; Instituts Universitaires de Technologie in France; Senshu Gakko, or special training schools, in Japan; and so forth. While some of those schools have costly equipment needs, and most provide more direct faculty-student contact than commonly found at the university level, they tend also to feature heavier teaching loads, shorter time to completion (lower opportunity costs of foregone student earnings), and more aggressive pursuit of non-taxpayer funds from grants, gifts, and tuition.

6. Higher education will continue to broaden its revenue base away from overwhelming reliance on the taxpayer. In addition to their continued need for taxpayer-generated revenue, institutions will seek more funds from:

- o tuitions -- from parents and students;
- o grants and contracts -- from industries and governmental agencies;
- o gifts -- from individuals, foundations, and corporations; and
- o the sale of services -- from patents, joint ventures, and auxiliary business enterprises.

The United States will continue to be a leader in this aggressive and increasingly entrepreneurial diversification of higher education's revenue base. The United Kingdom reforms reported above have a similar goal. The Soviet Union in 1988 announced a plan to charge state-owned enterprises 3,000 Rubles ($1,800) for each specialist they hire, with the funds going to the institutions as a kind of employer-paid graduating tuition.[41] And even China by the spring of 1989 was hearing speculations about tuition from its higher education ministry.[42]

The most significant and controversial of these shifts is in the increasing pressure in nations that have not had a system of tuition to devise some way of passing some institutional costs on

to parents and students via tuition, and to shift some student maintenance support from taxpayer-borne grants to (partially) student-borne loans. Loans have borne a significant share of student living costs in Scandinavia, and an uneven but increasing share of both instructional and maintenance costs in the United States, Canada, and Japan. Germany in 1984 converted its student maintenance grants -- The Bundesausbildungforderungsgesetz, or "BAföG" -- to loans, albeit heavily subsidized.[43] The United Kingdom, after decades of contentious starts and stops, announced a "Top-up" loan program to begin in 1990, with the declared object being to displace, over time, some of both the parents' and the taxpayers' burdens. There also exists a substantial record of analyses and recommendations for the efficacy of student loans in much of the less-developed world.[44]

The pressure for shifting costs onto students emanates from several sources. First, it is a way to relieve public treasuries, burdened by other demands for public funds, as well as taxpayers, calling for relief. Second, it is thought by many to be a step toward greater equity, in a shift of at least some of the cost burden to those who will most benefit from the costly higher education. Third, it is often assumed that students who have to pay something for the privilege of their higher education will be more likely to apply themselves academically, to demand better value from their universities, and to get out of the institutions and into productive jobs with the least delays. Problems with student loans include high and prolonged administrative costs; the difficulty of having to ration fairly a limited supply, particularly when the loans carry substantial subsidies; and the political unpopularity of student loans. It is likely, however, that pressure will continue for some way to assure that some appropriate share of costs is borne by students -- and this principle demands a way of shifting the actual burden forward via loans.

ENDNOTES

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3. Howard R. Bowen, The Costs of Higher Education (San Francisco: Jossey-Bass, 1980).

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8. For student loans in Scandinavia, see Johnstone, Sharing The Costs; Adam Gaines and Nigel Turner, Student Loans, The Costs and The Consequences: A Review of Student Financial Support in North America and Scandinavia, (London: The National Union of Students, 1985); Maureen Woodhall, Review of Student Support Schemes in Selected OECD Countries, (Paris: Organization for Economic Cooperation and Development, 1978).

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11. Jean-Pierre Jallade, "Financing Higher Education: The Equity Aspects," Comparative Education Review 22 (June 1978): p. 314.

12. Psacharopoulos and Woodhall, Education for Development, p. 279. See Mingat and Tan, "Financing Public Higher Education," p. 269, for a similar conclusion.

13. See Johnstone, Sharing The Costs of Higher Education, pp. 112-118.

14. Gwendolyn L. Lewis, "Trends in Student Aid: 1980-1988," (New York: The College Board, 1988).

15. See William J. Byron, S.J., "Establishing a Federal Revolving Fund With Income Contingent Repayments," and Robert D. Reischauer, "Applying the Social Insurance Concept to Student Loans" in Radical Reform or Incremental Change? Student Loan Policy Alternatives for The Federal Government, ed., Lawrence E. Gladieux (New York: The College Board, 1989). For economic and policy analysis of income contingent loan concept see D. Bruce Johnstone, New Patterns for College Lending: Income Contingent Loans (New York: Columbia University Press, 1972).

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24. Ibid., p. 61, Table B-2.

25. Ibid., p. 65, Table B-6.

26. See Johnstone, Sharing The Costs, pp. 167-171, for a discussion of loan subsidies and their conversion to "effective grants."

27. Kaneko (1988), p. 19.

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29. Report of The Committee on Higher Education Funding, Neville Wran, Chairman (Canberra: Australian Government Publishing Service, April 1988, "Wran Report"), p. 14; Australian dollars are converted to American dollars at the 1988 1st quarter exchange rate of $1 U.S. = $1.354 Australian.

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33. Wran Report.

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